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Taiwan Poultry and Products Annual 2005

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Report Highlights:

Imports are rising significantly in the wake of Taiwan's elimination of all tariff rate quota restrictions. Broiler meat imports are expected to rise nearly 50% this year and another 20% next. The United States is currently in a strong supply position, being one of only six countries certified for poultry exports to Taiwan and the only one of these with sufficient volumes and competitive pricing points. Poultry consumption grew during 2004 and may continue to do so in the next year or two due to production and supply issues faced by other meat proteins. Consumption levels should stabilize in the 770~780K mt range, or fall back slightly, once these issues are resolved / overcome.

Includes PSD Changes: Yes Includes Trade Matrix: Yes Annual Report Taipei ATO [TW2] [TW]

EXECUTIVE SUMMARY

Poultry meat and eggs are pillars of the traditional Chinese diet. From *kungpao* chicken, Peking duck, and stir-fries to Cantonese-style air dried duck, "1,000 year-old" eggs, and deep-fried chicken nuggets, Taiwan today consumes approximately 762 thousand metric tons of poultry meat (about 85% of this chicken) and 7.5 billion eggs annually. This translates into around 32.5 kg of poultry and 380 eggs per capita. Local producers currently supply approximately 90% of the overall poultry meat and offal market, 90% of the broiler meat and offal market and 100% of the egg market. The broiler meat and offal market, in particular, present opportunities for continued significant US export growth over the coming 2~3 year period.

The market for broiler meat and certain relatively lucrative poultry offal categories were subject to strict quota volume limitations until January 1st, 2005, when imports were normalized, although subject to a WTO-permitted special safeguard (SSG) levy (which adds roughly an additional 6.5% to the Customs-cleared cost of imports). Generally high current market prices for meat proteins, coupled with a still relatively inefficient poultry domestic production base, saw imports into the broiler segment rise exponentially in the months immediately following liberalization. Continuing structural problems with domestic producers, high domestic prices, and increasingly sophisticated marketing programs on the part of overseas producers and associations are expected to help boost imports of broiler meat over the 100,000 mt level within 2 years (2007) – at which time imports could account for roughly 15% of broiler meat consumption.

The United States is the predominant supplier of poultry, and one of only nine countries currently eligible to export to Taiwan based on sanitary approvals. The United States (US) is expected to retain a dominant position through the foreseeable future.

Taiwan's current limited beef imports (Taiwan is currently restricted by BSE related bans to importing primarily from Australia and New Zealand) and chronically high market prices for Taiwan's other two meat protein staples – pork and seafood – has been encouraging consumers to purchase more chicken over the past year plus and given local producers a welcome respite from nearly 5 years of pressure to reduce production and close less efficient producers. High prices for poultry (about 20% above last year on a month-by-month comparison) reflect this higher consumption of broiler meat. Domestic production of broiler meat is up nearly 17 million head (24K mt) from last year (achieved by shifting production over from native (*tuji*) hens).

Significantly, this windfall broiler meat consumption is currently being shared relatively equally between local producers and importers (5:4).

Taiwan currently exports only limited quantities of poultry products, mostly fresh/frozen meat and prepared chicken and duck eggs, to customers in the region. Taiwan broiler producers, in particular, are hoping to see a growing market for processed broiler breast (white) meat in western markets, particularly the United States. The United States Department of Agriculture (USDA)'s Food Safety Inspection Service is in the midst of the fairly lengthy review process to establish the equivalency of Taiwan's poultry slaughter and processing inspection system.

Despite relative stable year-to-year demand for poultry over the long-term, the outlook for imports is positive in the critical category of broiler meat. With a cost structure that is stacked against local birds, imported frozen chicken meat, particularly leg quarters and drumsticks, is expected to continue earning market share away from local producers through

the foreseeable future. By 2007, imports of frozen chicken drumsticks and leg quarters are currently forecast at more than double 2003 levels (around 100K mt). Given continued favorable pricing for turkey, similar opportunities exist for exports of frozen US turkey meat.

POULTRY

Production

While long-term, the poultry meat production sector in Taiwan is on a gradual downward trend and the market share of imports is rising, broiler production rose nearly 9% (24,000 mt) during 2004 to 299 thousand mt. This is attributed to a continued healthy consumer economy and continued high prices for other proteins including pork, beef and seafood. This year's reverse in the anticipated $2\sim4\%$ annual decline, while significant, is grounded in historically high prices for alternative meat proteins, and thus represents a windfall not likely sustainable once factors stabilize for other meats (e.g., additional pork production is brought online, restrictions on US / Canadian beef are eased).

During 2004, domestic production in other categories, including non-broiler chickens (i.e., non-standardized varieties known collectively as *tuji*), ducks, geese, and turkeys either saw mild declines or maintained production levels similar to the previous year. While broiler production through the long-term faces direct threat from imports, these other categories are relatively insulated due to local taste preferences / factors and may slightly increase or decrease from year to year due largely to local demand factors.

Chickens (both broiler and various non-broiler (*tuji*) varieties) dominate the poultry industry in Taiwan - accounting for 84% (2004) of all poultry raised. Ducks follow a distant second at around 10%, with geese, turkeys, and game birds accounting for the remainder. During 2005, 380 million head of chicken should be channeled into meat & offal production and an average 34 million head will be engaged as layers. In a similar ratio, Taiwan will slaughter 32 million head of duck this year while employing an average 2.5 million head in egg production. Figures are expected to change significantly in 2006. Eggs of poultry other than chickens and ducks are not produced on a commercial scale.

Table 1: Poultry Production, Supply, and Demand

Commodity	Poultry, N	Meat, Tota	al	(1000 MT)(MIL HEAD)			
	2004	Revised	2005	Estimate	2006	Forecast	UOM
	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	
Market Year Begin		01/2004		01/2005		01/2006	MM/YYYY
Inventory (Reference)	0	0	0	0	0	0	(MIL HEAD)
Slaughter (Reference)	0	0	0	0	0	0	(MIL HEAD)
Beginning Stocks	0	0	0	0	0	0	(1000 MT)
Production	0	692	0	697	0	691	(1000 MT)
Whole, Imports	0	0	0	0	0	0	(1000 MT)
Parts, Imports	0	70	0	78	0	90	(1000 MT)
Intra EC Imports	0	0	0	0	0	0	(1000 MT)
Other Imports	0	0	0	0	0	0	(1000 MT)
TOTAL Imports	0	70	0	78	0	90	(1000 MT)
TOTAL SUPPLY	0	762	0	775	0	781	(1000 MT)
Whole, Exports	0	0	0	0	0	0	(1000 MT)
Parts, Exports	0	2	0	2	0	4	(1000 MT)
Intra EC Exports	0	0	0	0	0	0	(1000 MT)
Other Exports	0	0	0	0	0	0	(1000 MT)
TOTAL Exports	0	2	0	2	0	4	(1000 MT)
Human Consumption	0	760	0	773	0	777	(1000 MT)
Other Use, Losses	0	0	0	0	0	0	(1000 MT)
Total Dom. Consumption	0	760	0	773	0	777	(1000 MT)
TOTAL Use	0	762	0	775	0	781	(1000 MT)
Ending Stocks	0	0	0	0	0	0	(1000 MT)
TOTAL DISTRIBUTION	0	762	0	775	0	781	(1000 MT)
Calendar Yr. Imp. from U.S.	0	67	0	73	0	85	(1000 MT)

Commitments made by Taiwan during WTO accession negotiations to open its chicken meat and poultry offal markets to international competition at the start of 2005 imply that domestic poultry producers - for so many decades insulated from global competition - must adapt to the new competitive regime or concede to foreign competition a significant chunk of current sales. This has resulted in shift in recent years, expected to continue into the foreseeable future, of farmers shifting gradually away from broiler production (estimated at around a 3% drop per year) and toward increasing production of various *tuji* varieties (estimated at around a 2% gain per year).

During 2004 and 2005, however, the unusually high prices consistently fetched by broiler meat has led to production shifting away from *tuji* and back to broiler chickens, reversing the abovementioned trend. The broiler to *tuji* slaughter ratio, which averaged 55:46 over the past two years, went to 59:41 in 2004. The ratio is not expected to shift much further in favor of *tuji* as rises in market prices for *tuji* should offset any benefits seen from additional shifts into broiler production.

Attempting to help prepare the poultry industry for increasing competition, Taiwan authorities have implemented measures to 1) consolidate production, 2) modernize production and marketing, and 3) create consumer loyalty to local poultry products.

<u>Production Consolidation</u>: After offering to pay farmers to move away from chicken rearing between 1998 and 1999, the Council of Agriculture (COA) has since largely allowed market forces to determine how many farms remain in operation.

<u>Modernization</u>: Through the COA and its several key research affiliates, Taiwan has ongoing programs targeting cooperative extension services for poultry farmers and processors as well as research into breed improvement and consumer product development.

<u>Customer Loyalty Programs</u>: Acknowledging that the broiler segment will face the brunt of coming foreign competition, authorities have been targeting other poultry categories (in particular, eggs and local chicken varieties [i.e., *tuji*]) with technical and marketing assistance to help these segments grow in value and realize gains in production efficiency. One component of this assistance is the introduction of certification marks "T-U-G" for local chicken varieties and "EGG" for locally-raised eggs. The hope is that, over time, consumer awareness of local products and demand for "unique" Taiwan poultry varieties (while as yet ill-defined as commercial breeds, these include varieties such as *tuji*, *wuguji*, and *fangshanji*) will result in increased demand.

Consumption

The average Taiwanese consumes around 75 kg of meat annually. Drops in consumption, due to SARS (2Q 2003) and a controlled-outbreak of avian influenza during 1Q 2004 proved short term (see the Feb. 2004 ATO Taipei report: <u>Avian Influenza - Initial Market Impact Assessment</u>), and consumption has since recovered to normal levels. Poultry is a staple of the Chinese diet and, as consumers begin choosing lower fat meals, chicken may, over the longer term, gain ground against other meat proteins. Lower fat content has not yet, however, become a significant factor in meat purchasing decisions by Taiwan consumers.

Concerns about the potential impact of future avian influenza outbreaks (specifically current worries about H5N1), while not yet impacting consumption, have the potential of severely impacting both domestic production and market demand. Taiwan's experiences with incidences of low pathogenic avian influenza demonstrate the vulnerability of local poultry flocks (despite Taiwan's relative isolation as an island) to infection from both migratory birds and the (believed relatively limited) smuggling of poultry / poultry products from China.

Trade

Taiwan liberalized the importation of broiler meat and a limited list of offal products still subject to tariff rate quota (TRQ) on January f^t , 2005. Prior to 2005, TRQs effectively limited imports to a less than 8% share of Taiwan's poultry market.

From 2005, Taiwan's WTO Accession Agreement permits Special Safeguard (SSG) charges on imports of certain products that are no longer restricted by quota volume limits when market prices or import volumes for these products exceed certain "trigger" evels. In terms of poultry products, SSG protection is to be allowed for two product categories: "Chicken Legs and Wings" and "Poultry Offals". It is understood that Taiwan authorities do implement the additional SSG tariffs on products in these two categories. Please refer to the "Chicken, Trade Policy" section below for additional details regarding the SSG.

US exporters are expected to dominate the import market through the foreseeable future. Canada and Australia are currently the only other major producing nations that have earned sanitary clearance to export to Taiwan (neither currently do so in significant quantity). No other country is reported to be actively pursuing sanitary approval for poultry products at this time. Exports from China in particular are not expected in the foreseeable future due both to sanitary and political issues.

Poultry offal, an important component of which became fully liberalized upon Taiwan's WTO membership, represents a major source of new opportunity for exporters from countries with

¹ For purposes of this report and unless otherwise noted, all local varieties are categorized under the generic name "tuji".

sanitary clearance. Other products that were open for import even prior to WTO entry (e.g., eggs, game bird meat, goose/duck meat) are expected to see little additional import interest due to factors including domestic oversupply, preference for fresh (as opposed to frozen) meat, and well-established distribution channels.

Tables 2 & 3. Poultry Import and Export Volumes (in 1,000 metric tons)

Commodity	Poultry, Meat,		Commodity Time Period	Poultry, 2003-2004		otal 1,000mt
Time Period	2003-2004 Units:	1,000mt	Exports for:	2003		2004
Imports for:	2003	2004	U.S.	0	U.S.	0
U.S.	48.3 U.S.	66.8	Others		Others	
Others	Others		Japan	3.5	Japan	1.6
Canada	1 Canada	2.6	Hong Kong	0.5	Vietnam	0.3
			China	0.2		
Total for Others	1	2.6				
Others not Listed	0	0.1	Total for Others	4.2		1.9
Grand Total	49.3	69.5	Others not Listed			0.1
			Grand Total	4.2	_	2

Trade Policy

As of 1 January 2005, Taiwan exercises a normalized tariff system for poultry imports. Tariff rates are applied as follows:

Product	Tariff	Product	Tariff
Chicken Meat	20%	Goose Meat	25%
Turkey Meat	8.5~10%	Eggs in Shell (prepared)	30%
Duck Meat	35%	Poultry Offal	21% fatty livers 25% chicken livers, hearts, other; other turkey offal 30% turkey hearts 34% chicken necks, turkey hearts (froz)

Taiwan fulfilled its commitment to the World Trade Organization (WTO) on poultry by eliminating its final remaining TRQs on several poultry products on January 1st, 2005. Initial concerns by poultry farmers, largely expressed through local agriculture associations, that imports would flood the market and put domestic poultry producers out of business have largely failed to be realized. Again, this is due primarily to factors external to the poultry industry. In fact, imports have increased significantly during the first half of 2005, while farmers have continued to maintain slaughter numbers and profits. This political and economic sweet spot has kept visible opposition to the new TRQ-free import regime to a minimum and warded off potentially negative political attention to poultry imports.

Taiwan suspended the importation of poultry raised or processed in the state of New York in June 2005 due to an outbreak in that state of low pathogenic avian influenza (H7N2). Taiwan currently permits poultry imports from all other US states.

Taiwan requires that a country/region apply for, and be certified as, free of both Highly Pathogenic Avian Influenza (HPAI) and Newcastle Disease (ND) as part of the approval process to export poultry meat to the island.

Countries approved as of August 2005 as HPAI-free include: Singapore, the Philippines, Saudi Arabia, New Zealand, Australia, the United States, Canada (including British Columbia, which had previously been suspended), France, the United Kingdom, Denmark, Spain, Sweden, Finland, Guyana, Mexico, Costa Rica, Panama, Uruguay, Brazil, Honduras, Argentina, Ecuador, Botswana, Mozambique, Austria, Hungary, Germany, the Netherlands (new as of 9/04), Poland (new as of 9/04), and Belgium (as of 2/05).

Countries approved as of August 2005 as ND-free include: the United States, Australia (with the exception of New South Wales), New Zealand, Canada (with the exception of Saskatchewan), Costa Rica, Panama, Spain, Hungary, and Poland.

CHICKEN

Production

Taiwan's chicken production falls into two categories, namely US-style broilers and native / crossbred birds. The latter include native chicken breeds as well as chickens resulting from crossbreeding native roosters with broiler hens. While different names are used to identify the $3 \sim 4$ major native / crossbred categories sold in market (including tuji, wuguji, and fangshanji).

Taiwan produced 601 thousand mt of chicken meat in 2004, with levels expected to hold relatively steady in 2005 and 2006 due to favorable prices for broiler meat. A continued focus on consolidation in the industry, with larger producers buying out smaller ones will continue through the coming several years. This is due to continued predominance of small-scale farmers who continue to produce chickens in the same volumes despite low prices and demand.

Under normal pricing conditions for meat proteins (i.e., when beef, pork and chicken are readily available at the market at reasonable prices), we anticipate relatively steady market demand for both broiler and tuji meat and a production ratio gradually shifting from the current 59:41 broiler meat & offal to *tuji* meat & offal ratio to a more economically sustainable 40:60 ratio in favor of *tuji*, which will require imports of 100,000 mt or more of broiler meat.

Table 5. Chicken Meat Production, Supply, and Demand (in 1,000 mt)

Commodity	Poultry,	Meat, Bro	iler				
-	2004	Revised	2005	Estimate	2006	Forecast	UOM
	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	
Market Year Begin		01/2004		01/2005		01/2006	MM/YYYY
Inventory (Reference)	0	0	0	0	0	0	(MIL HEAD)
Slaughter (Reference)	0	0	0	0	0	0	(MIL HEAD)
Beginning Stocks	0	0	0	0	0	0	(1000 MT)
Production	586	600	580	605	0		(1000 MT)
Whole, Imports	0	0	0	0	0	0	(1000 MT)
Parts, Imports	47	46	60	67	0	82	(1000 MT)
Intra EC Imports	0	0	0	0	0	0	(1000 MT)
Other Imports	0	0	0	0	0	0	(1000 MT)
TOTAL Imports	47	46	60	67	0	82	(1000 MT)
TOTAL SUPPLY	633	646	640	672	0	682	(1000 MT)
Whole, Exports	0	0	0	0	0	0	(1000 MT)
Parts, Exports	1	0	1	1	0	1	(1000 MT)
Intra EC Exports	0	0	0	0	0	0	(1000 MT)
Other Exports	0	0	0	0	0	0	(1000 MT)
TOTAL Exports	1	0	1	1	0		(1000 MT)
Human Consumption	632	646	639	671	0	681	(1000 MT)
Other Use, Losses	0	0	0	0	0	0	(1000 MT)
Total Dom. Consumptic	632	646	639	671	0	681	(1000 MT)
TOTAL Use	633	646	640	672	0	682	(1000 MT)
Ending Stocks	0	0	0	0	0	0	(1000 MT)
TOTAL DISTRIBUTION	633	646	640	672	0	682	(1000 MT)
Calendar Yr. Imp. from	43	46	0	65	0	80	(1000 MT)

Government statistics report that just over 80% of broilers are slaughtered and processed in modern, sanitary facilities. Only 6% of *tuji* are similarly handled. The remainder are processed either in small, low-tech processing plants or killed & dressed in the many traditional wet markets. Government and industry-sponsored efforts to handle *tuji* in automated processing environments have been dogged by many problems, not least of which has been the lack of uniformity among *tuji*, even within species.

Even more so than the poultry industry in general, chicken farmers and processors must become efficient producers within a short span of several years, or accept a greatly reduced market share in the face of foreign competition. The government, directly and through industry associations, is supporting activities to advance industry consolidation / cooperation, product development, technical improvement, and consumer marketing efforts. The largest farm currently maintains a capacity of 210,000 head, with broader industry measures showing that better than 90% of broiler farms still operate on a scale of 20,000 head or less.

Industry experts note that the relatively small scale and protected nature of Taiwan's poultry rearing industry has saddled local producers with high relative costs of production. A survey updated in 2004 estimates the average investment (including depreciation costs) required to raise 100 head of farm gate-ready broilers at NT\$6,641. Average market prices in 2004 supported only a slight profit of NT\$178 per 100 head (NT\$403 if farmer's own labor is deducted from costs). [note: NT\$32.18 = US\$1.00].

Commodity Prices in	Poultry, Mea		kg
Year	2004	2005	% Change
Jan	31.79	35.64	
Feb	31.53	37.12	18%
Mar	31.49	39.16	24%
Apr	32.9	40.92	24%
May	33.39	38.98	17%
Jun	32.96	37.17	13%
Jul	35.26		-100%
Aug	36.09		-100%
Sep	36.29		-100%
Oct	35.61		-100%
Nov	33.37		-100%
Dec	33.73		-100%
Exchange Rate Date of Quote		Local Curr	•
Date of Quote	00/24/2003	ו ו /טט /ייייייי	1 1

Table 6. Farm Gate Prices for Broilers

Consumption

The last decade has witnessed steady growth in market demand for US-style broiler meat. In the home, breast and leg meat are heavily used in stir-fry dishes. Nearly all fast food chain restaurants, international and local, offer batter fried chicken breasts & drumsticks and processed chicken burgers. Spicy chicken wings, served with Western-style sauces, are staple menu fare at mid-range Western chain restaurants such as TGI Fridays & Dan Ryan's and are offered by nearly all pizza franchises as a popular side dish. Turkey wings, smoked and spiced locally to Chinese tastes, are hot sellers at grocery stores and hypermarkets. The flame-cooked chicken leg quarter with rice & veggies is (along with the pork chop) one of the two most popular lunch box entrees in Taiwan - accounting for better than 30% of all lunch box sales (est. 37% in 2004 due to higher relative pork and cod prices).

Offal consumption is expected to be little changed over the coming several years. Offal is consumed in greatest quantities by the street vendor food service segment -- which is less impacted by general economic conditions than other segments, such as sit-down restaurants and hotels. With domestic prices for offal significantly higher than in other markets, attractive sales opportunities for US firms exist now that this once-protected market is open to competition. However, there is some question as to whether the market can absorb the full quantity of the poultry offal TRQ, especially now that chicken liver and heart imports are liberalized.

An entrenched market preference for not-previously-frozen meat is the key driver sustaining significant local broiler meat sales through retail sales outlets and channeling imported cuts into processed and ready-to-serve formats (lunch boxes is one of the largest end-uses for frozen chicken thighs). While the import of chilled chicken cuts is widely deemed uneconomical, it is interesting to note that Taiwan's Customs Bureau recorded the island's first (at least in recent years) purchases of chilled chicken cuts during 2004 (49 mt in 2004 [24.5 mt from the US and Canada, respectively] and 217 mt during the first half of 2005 [192 mt from the US and 25 mt from Canada]).

Trade Policy

Taiwan requires that chicken meat and products enter Taiwan only from countries certified free of Highly Pathogenic Avian Influenza (HPAI) and Newcastle Disease (ND).

Taiwan imposes Special Safeguard (SSG) tariffs on chicken meat and offal products brought into Taiwan, based on the price and volume "triggers" noted in the following table.

SSG Triggers

Product Item	SSG implemented if volume exceeds:	SSG implemented if market price falls below:
Chicken Meat: Legs and Wings	23,953 mt	NT\$30,000 /mt
Chicken Meat: Other Cuts	included under above limit	NT\$42,000 / mt
Poultry Offal*	2,295 mt	N/A

^{*} Note: SSG does not apply to imports of poultry livers or of chicken hearts, feet, or necks.

The SSG levy increases the duty on chicken meat to 26.33% (as opposed to the 20% "normal" duty). The duty for offal is similarly affected.

Imports & Exports

Because of market preference, nearly all chicken meat import volume (97%) is dark meat (leg quarters), frozen (HS02071411002). This situation is expected to continue through the foreseeable future.

Table 7 & 8. Taiwan's Chicken Meat Imports and Exports (1,000mt)

Commodity	Poultry,		Broiler
Time Period	2003-2004	Units:	1,000 mt
Imports for:	2003		2004
U.S.	32	U.S.	44
Others		Others	
Canada	0.9	Canada	2
Total for Others	0.9	_	2
Others not Listed	0		0
Grand Total	32.9		46

Commodity	Poultry, Meat, Broiler						
Time Period	2003-2004	Units:	1,000 mt				
Exports for:	2003		2004				
U.S.	0	U.S.	0				
Others		Others					
Hong Kong	0.4	Hong Kong	0				
Japan	0.3	Japan	0				
China	0.2						
Total for Others	0.9		0				
Others not Listed	0		0				
Grand Total	0.9		0				

Marketing

As with most food products raised in Taiwan, there is an undercurrent of concern regarding the quality of local chicken among consumers. With the lifting of volume restrictions, US suppliers may benefit significantly by conducting promotion work which underscores the healthful conditions under which US chickens are reared, the emphasis on production and processing quality control at US facilities, and trust in US brand or country-of-origin labels.

In recent years, the COA established a quality certification logo for *tuji* to heighten its quality image and encourage increased consumption. The "T-U-G" label certifies that chicken was processed in a facility using modern, standardized processing techniques. The myriad obstacles to processing standardization in the *tuji* segment has held the volume of such to between 8% and 10% of *tuji* birds processed. Most *tuji* sold in supermarkets now bear this "T-U-G" logo. The largest retail outlet for *tuji*, the traditional market, is barred from participating in the "T-U-G" system as birds are slaughtered at time of purchase.

A Note About Tuji: Chinese consumers view native / crossbred chickens (tuji) as a meat product "similar to, but distinct from" broiler chickens. Tuji is used in many very traditional Chinese dishes (examples include sesame oil chicken, chicken soup [where meat, skin, and bones are simmered together with traditional herbs], and chicken cold plate) for which broiler meat is not an acceptable substitute. Similarly, tougher meat and lack of sizing standards make tuji unfit for most broiler applications.

Therefore, while production and marketing trends for *tuji* should be of interest to US broiler exporters, particularly from the context of how many broiler producers are heeding government calls to switch to *tuji* production, these two segments of the chicken meat market operate with significant independence from each other.

TURKEY

Production

Table 9. Production, Supply, and Demand Table for Turkey Meat (in 1,000 mt)

Commodity	Poultry, Meat, Turkey			(1000 MT)(MIL HEAD)			
•	2004	Revised	2005	Estimate	2006	Forecast	UOM
	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	
Market Year Begin		01/2004		01/2005		01/2006	MM/YYYY
Inventory (Reference)	0	0	0	0	0		(MIL HEAD)
Slaughter (Reference)	0	0	0	0	0	0	(MIL HEAD)
Beginning Stocks	0	0	0	0	0	0	(1000 MT)
Production	4	4	4	4	0	4	(1000 MT)
Whole, Imports	0	0	0	0	0	0	(1000 MT)
Parts, Imports	16	16	18	18	0	19	(1000 MT)
Intra EC Imports	0	0	0	0	0	0	(1000 MT)
Other Imports	0	0	0	0	0	0	(1000 MT)
TOTAL Imports	16	16	18	18	0	19	(1000 MT)
TOTAL SUPPLY	20	20	22	22	0	23	(1000 MT)
Whole, Exports	0	0	0	0	0	0	(1000 MT)
Parts, Exports	0	0	0	0	0	0	(1000 MT)
Intra EC Exports	0	0	0	0	0	0	(1000 MT)
Other Exports	0	0	0	0	0	0	(1000 MT)
TOTAL Exports	0	0	0	0	0		(1000 MT)
Human Consumption	20	20	22	22	0	23	(1000 MT)
Other Use, Losses	0	0	0	0	0	0	(1000 MT)
Total Dom. Consumption	20	20	22	22	0	23	(1000 MT)
TOTAL Use	20	20	22	22	0	23	(1000 MT)
Ending Stocks	0	0	0	0	0	0	(1000 MT)
TOTAL DISTRIBUTION	20	20	22	22	0	23	(1000 MT)
Calendar Yr. Imp. from U.S.	16	15	0	17	0	18	(1000 MT)

Turkey production in Taiwan is largely channeled into foodservice dishes (either advertised as turkey or covertly as chicken). A small volume (estimated at only some 10%) is channeled into other applications such as pork substitute in processed foods and street vendor cooked-to-order barbequed wings / tails. Turkey production is expected to hold steady through the coming several years.

Consumption

While domestic turkeys have principally been channeled into turkey fried rice and fresh food service channels, imported turkeys and turkey meat are principally used as (1) a substitute for pork in processed foods (turkey thigh meat), (2) for prepared barbecued wings sold by vendors or at grocery / hypermarket stores, and (3) as an oven-baked meal for Thanksgiving and Christmas.

Domestic turkeys are sold fresh or chilled, while imported turkeys / turkey meat are sold frozen. As mentioned previously, turkey thigh meat is accepted by manufacturers as a pork substitute / filler in processed meat products. The trigger hog price that justifies using turkey thigh meat as a cost-down substitute for pork is reportedly around NT\$5,000 / 100 kg live weight. Recent pork prices have been high, with June 2005 quotes averaging NT\$5,400

/ 100kg live weight. This, combined with reasonable FOB prices for turkey, has rallied demand for turkey as a meat-filler in Taiwan's food processing industry. Imports of frozen turkey meat are expected to rise another 12% next year and, with steady producer prices, should remain at these historically high levels.

Trade

As with chicken meat, turkey imports into Taiwan must arrive from countries certified by Taiwan authorities as free of both ND and HPAI. The United States is expected to be the only registered exporter of turkeys to Taiwan through the foreseeable future.

Tables 10 & 11. Imports & Exports of Turkey Meat (1,000 metric tons)

Commodity	Poultry,	Meat,	Turkey	Commodity	Poultry,	Meat,	Turkey
Time Period	2003-2004	Units:	mt	Time Period	2003-2004	Units:	1000mt
Imports for:	2003		2004	Exports for:	2003		2004
U.S.	15.6	U.S.	15.1	U.S.	0	U.S.	0
Others		Others		Others		Others	
Canada	0.1	Canada	0.7		0		0
Total for Others	0.1	_	0.7	Total for Others	0	•	0
Others not Listed	0		0	Others not Listed			
Grand Total	15.7		15.8	Grand Total	0		0

Marketing

Efforts to increase turkey meat sales at the retail level continue to be dogged by consumer lack of understanding of meat characteristics / qualities and poor product availability in retail outlets (grocery stores, hypermarkets, traditional markets). Turkey meat in sausages is typically used "covertly", with either no mention at all on the packaging (aside from the small-print ingredient label) or simply a statement that the sausages are lower in fat.

Turkey lacks a foundation in the Chinese universe of ingredients and thus does not find a ready home in dishes such as stir-fries and soups. The Chinese chef, whether in the home or in a restaurant, is typically not innovative and would be unwilling on his/her own to substitute turkey meat in, for example, a stir-fry that calls for chicken. Appropriate consumer education and promotion should help pique interest and salve concerns regarding substituting turkey for other poultry meats in popular dishes. The market for turkey in Western dishes represents a small niche market comprised primarily of 4- and 5-star hotels and a few restaurants in Taipei, Taichung, and Kaohsiung.

Duck

Three-thousand years of duck rearing history in China bequeath to Taiwanese a well-founded fondness for duck meat and eggs. The distinctive dishes in which duck products are served give duck meat and eggs a market categorization distinct from other poultry meats and products.

Production and consumption of duck is expected to remain stable during 2004 and 2005 (at around 64,000 mt), due to the lack of growth in the food service industry. In terms of domestic production, ducks raised in Taiwan for meat production are principally of the variety

tufanya (80%), with the remainder divided roughly evenly between fanya and beijingya (Peking duck) breeds. Layers are almost exclusively of the chensecai variety.

In recent history, the duck farming and processing industry in Taiwan was heavily exportoriented, with exports of meat, eggs, and feathers targeting consumers in Japan and Southeast Asia. The entry of China as a low cost duck meat / products exporter has pared export markets for Taiwan ducks significantly. The entry of both China and Taiwan into the WTO is expected to cut further into the margins of local producers margins and, eventually, entice international sales into this market. Industry experts anticipate that high-quality US producers will pose the most effective challenge to domestic ducks. China and Thailand offer strong price competition - although current sanitary restrictions rule out importation from either.

The current tariff for duck meat (whole) is 35%. No duck meat is expected to be imported into Taiwan during 2005 or 2006 due to flavor expectations of consumers (Taiwan-raised, freshly-slaughtered), conservative supplier - buyer relationships, and little market growth in this category.

GEESE

As late as the 1980s, geese were generally raised as a sideline to a main farm business, such as fish or vegetable farming. As such, the industry remains in the early stages of development as a production-scale industry. Taiwan breeds are largely descended from varieties including White Roman & Embden (imported initially from Denmark during the 1970s and 80s) and Tulouse, African, and White Chinese (imported during the 1980s from the US).

During 2005, Taiwan is expected to produce about 26,000 mt of goose meat. Most goose meat is sold as a ready-to-eat product in small local restaurants. Although goose meat imports are permitted, no imports have occurred in recent years nor are they expected in the near future. Similarly, Taiwan is not expected to export any goose meat in 2005 or 2006.

EGGS

Production

Table 12. Production, Supply, and Demand Table: Chicken Eggs (in million pcs.)

Commodity	Poultry, Eggs			(MIL HEAD)(MIL PCS)			
	2004	Revised	2005	Estimate	2006	Forecast	UOM
	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	USDA Official [Old]	Post Estimate[New]	
Market Year Begin		01/2004		01/2004		01/2004	MM/YYYY
Layers	0	35	0	35	0		(MIL HEAD)
Beginning Stocks	0	1160	0	1100	0		(MIL PCS)
Production	0	7416	0	7400	0		(MIL PCS)
Hatch Eggs, Imports	0	1	0	1	0		(MIL PCS)
Shell Eggs, Imports	0	0	0	1	0		(MIL PCS)
Other Imports	0	0	0	0	0	0	(MIL PCS)
Intra EC Imports	0	0	0	0	0	0	(MIL PCS)
TOTAL Imports	0	1	0	2	0		(MIL PCS)
TOTAL SUPPLY	0	8577	0	8502	0		(MIL PCS)
Hatch Eggs, Exports	0	0	0	0	0	0	(MIL PCS)
Shell Eggs, Exports	0	1	0	1	0	1	(MIL PCS)
Other Exports	0	8	0	8	0	8	(MIL PCS)
Intra EC Exports	0	0	0	0	0	0	(MIL PCS)
TOTAL Exports	0	9	0	9	0	9	(MIL PCS)
Hatch Eggs, Consumption	0	0	0	0	0	0	(MIL PCS)
Shell Eggs, Human	0	6768	0	6693	0	6692	(MIL PCS)
Shell Eggs,OT.Use/Loss	0	200	0	200	0	200	(MIL PCS)
Other Dom. Consumption	0	500	0	500	0	500	(MIL PCS)
Total Dom. Consumption	0	7468	0	7393	0	7392	(MIL PCS)
TOTAL Use	0	7477	0	7402	0	7401	(MIL PCS)
Ending Stocks	0	1100	0	1100	0	1100	(MIL PCS)
TOTAL DISTRIBUTION	0	8577	0	8502	0	8501	(MIL PCS)
Calendar Yr. Imp. from U.S.	0	1	0	2	0	1	(MIL PCS)

Poultry eggs include hen and duck eggs. Egg production was 7.4 billion pieces in 2004 and the market found a certain level of stability, which is holding prices at levels about 20% above than the lows of recent years. In-shell eggs supply three-quarters of demand. Producers are continuing to make strides in automated production, washing, and sorting, although a majority (64%, 2003 estimate) of chicken eggs continue to be sold unsorted and unpackaged. Industry plans to construct one or more powdered egg processing plants to help channel excess supply out of the immediate market have been announced, although no specific funding has yet been allocated. Such processing capability could do much to help reduce the impact of overproduction, which promises to continue to dog this market.

Nearly the entirety of duck egg production is consumed as salty and alkalized (1,000 year-old) eggs. As both are traditional foods, demand from year to year is largely stable - at around 540 million pieces.

Dioxin contamination of duck eggs in a limited area of southern Taiwan in the spring of 2005 (news broke during May / June) caused a short-lived consumer avoidance of 1,000 year-old and salty eggs (the main end uses of duck eggs in Taiwan). Overall the impact was minimal. (for additional information, please refer to the report *Dioxin Identified in Duck Eggs* at: http://www.fas.usda.gov/gainfiles/200507/146130384.pdf).

Duck layers number approximately 2.7 million, while hen layers number around 35 million.

Price

Chicken egg production costs are estimated at NT\$20 per kg, with the industry considered profitable when farm gate prices are higher than NT\$26 per kg. 2004 is anticipated to realize an average increase in farm gate prices of around 8%.

Commodity Poultry, Eggs Prices in NT Dollars per uom kg Year 2004 2005 % Change 32.81 32.23 -2% Jan Feb 27.98 32.47 16% 30.59 34.29 12% Mar 34.14 27.82 23% Apr 24.73 31.29 27% Mav 30.93 25.09 23% Jun Jul 26.83 -100% 24.54 -100% Aug 29.05 -100% Sep Oct 24.33 -100% Nov 28.07 -100% 30.94 Dec -100% 32.18 Local Currency/US \$ Exchange Rate Date of Quote 08/25/2005 MM/DD/YYYY

Table 13. Farm Gate Prices for Chicken Eggs

Consumption

Egg consumption is around 338 eggs per capita, reportedly the third highest in the world – after Japan and Hong Kong. Most chicken eggs are destined for table use and sold through traditional or grocery stores, prepared in restaurants, or retailed as stewed or tea-marinated eggs. Approximately 5% of all domestic chicken eggs are processed into liquid and powdered eggs. Currently Taiwan has no regulation requiring pasteurization of liquid eggs and so production is scattered amongst small-scale producers recovering the whites and yolks of broken whole eggs. Statistics record an uptick in powdered egg production due to government and industry-inspired efforts to provide price supports for fresh eggs. There remains little trade, either local or international in liquid or powdered eggs as most downstream product manufacturers and consumers request whole eggs.

Egg Products: Nearly all duck eggs are consumed as salty and 1,000 year-old eggs. The small volume of out-of-shell chicken egg products consumed include liquid eggs and powdered eggs.

Marketing

Four of every 5 eggs retailed to consumers are sold by farms to traditional markets and retail outlets in 12 kg trays. Consumers purchase by weight or by number based on individual retailer practice. Traditional market vendors typically sell by weight, while local convenience

store chains and some local grocers sell by number. The remaining retail eggs are packaged in 10-piece cartons and distributed principally through supermarket and hypermarket chains.